IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

SMARTFLASH LLC, *et al.*,	§	
	§	
Plaintiffs,	§	CIVIL ACTION NO. 6:13cv447
	§	
v.	§	
	§	**JURY TRIAL DEMANDED**
APPLE INC., *et al.*,	§	
	§	
Defendants.	§	

	§	
SMARTFLASH LLC, *et al.*,	§	
	§	
Plaintiffs,	§	CIVIL ACTION NO. 6:13cv448
v.	§	
	§	**JURY TRIAL DEMANDED**
SAMSUNG ELECTRONICS CO., LTD.	§	
et al.,	§	
	§	
Defendants.	§	
	§	

REPORT AND RECOMMENDATION

This Memorandum Opinion construes the disputed claim terms in United States Patent

Numbers: (1) 7,334,720; (2) 7,942,317; (3) 8,033,458; (4) 8,061,598; (5) 8,118,221; and (6)

8,336,772. Also before the Court are Defendants Apple, Inc., Robot Entertainment, Inc.,

KingIsle Entertainment, Inc., Samsung Electronics Co., Ltd., Samsung Electronics America, Inc.,

Samsung Telecommunications America, LLC, HTC Corporation, HTC America, Inc., Exedea,

Inc. and Game Circus LLC's (collectively "Defendants") Motions for Summary Judgment of

Indefiniteness (6:13-cv-447 Doc. No. 161 & 6:13-cv-448 Doc. No. 177) ("Motions for Summary

Judgment"). On July 17, 2014, the parties presented arguments on the disputed claim terms and

the Motions for Summary Judgment at the *Markman* hearing. For the reasons discussed below,

the Court resolves the claim term disputes as stated below and recommends that Defendants'

Motions for Summary Judgment of Indefiniteness be **DENIED**.

BACKGROUND

On May 29, 2013, Plaintiffs Smartflash LLC and Smartflash Technologies Limited

(collectively "Smartflash") filed two separate actions, one against Defendants Apple, Inc., Robot

Entertainment, Inc., KingIsle Entertainment, Inc., and Game Circus LLC (6:13-cv-447), and one

against Defendants Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., Samsung

Telecommunications America, LLC, HTC Corporation, HTC America, Inc., Exedea, Inc. and

Game Circus LLC (6:13-cv-448). Smartflash alleges Defendants infringe the following patents:

U.S. Patent No. 7,334,720; U.S. Patent No. 7,942,317; U.S. Patent No. 8,033,458; U.S. Patent

No. 8,061,598; U.S. Patent No. 8,118,221; and U.S. Patent No. 8,336,772. All patents are titled

"Data Storage and Access Systems." The patents-in-suit all stem from a common specification

and share a common written description and figures. In the interest of simplicity, the '720 Patent

is cited unless otherwise specified.

APPLICABLE LAW

Claim Construction

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention

to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303,

1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381

F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent's intrinsic evidence to define the

patented invention's scope. *Id.* at 1313–1314; *Bell Atl. Network Servs., Inc. v. Covad Commc'ns

Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the

rest of the specification and the prosecution history. *Phillips*, 415 F.3d at 1312–13; *Bell Atl.*

Network Servs., 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

Claim language guides the Court's construction of claim terms. *Phillips*, 415 F.3d at 1314. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Id.* Other claims, asserted and unasserted, can provide additional instruction because "terms are normally used consistently throughout the patent." *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex. Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning that it would otherwise possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343-44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of

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the claim to be ascertained from the words alone." *Teleflex, Inc.*, 299 F.3d at 1325. For example, "[a] claim interpretation that excludes a preferred embodiment from the scope of the claim 'is rarely, if ever, correct." *Globetrotter Software, Inc. v. Elam Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, "[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims." *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) ("As in the case of the specification, a patent applicant may define a term in prosecuting a patent"). The well-established doctrine of prosecution disclaimer "preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution." *Omega Eng'g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). The prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002); *see also Springs Window*, 323 F.3d at 994 ("The disclaimer . . . must be effected with 'reasonable clarity and deliberateness.'") (citations omitted)). "Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover." *Spectrum Int'l v. Sterilite Corp.*, 164 F.3d 1372, 1378–79 (Fed. Cir. 1988) (quotation omitted). "As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice

function of the intrinsic evidence and protects the public's reliance on definitive statements made during prosecution." *Omega Eng'g, Inc.*, 334 F.3d at 1324.

Although, "less significant than the intrinsic record in determining the legally operative meaning of claim language," the Court may rely on extrinsic evidence to "shed useful light on the relevant art." *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help the Court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but "conclusory, unsupported assertions by experts as to the definition of a claim term are not useful." *Id.* Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.*

The patent in suit may contain means-plus-function limitations that require construction. Where a claim limitation is expressed in means-plus-function language and does not recite definite structure in support of its function, the limitation is subject to 35 U.S.C. § 112 ¶ 6. *Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). In relevant part, § 112 mandates that "such a claim limitation be construed to cover the corresponding structure . . . described in the specification and equivalents thereof." *Id.* (citing 35 U.S.C. § 112 ¶ 6.). Accordingly, when faced with means-plus-function limitations, courts "must turn to the written description of the patent to find the structure that corresponds to the means recited in the [limitations]." *Id.*

Construing a means-plus-function limitation involves two inquiries. The first step requires "a determination of the function of the means-plus-function limitation." *Medtronic, Inc.*

v. Advanced Cardiovascular Sys., Inc., 248 F.3d 1303, 1311 (Fed. Cir. 2001). Once a court has determined the limitation's function, "the next step is to determine the corresponding structure disclosed in the specification and equivalents thereof." *Medtronic*, 248 F.3d at 1311. A structure is corresponding "only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim." *Id*. Moreover, the focus of the corresponding structure inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is "clearly linked or associated with the [recited] function." *Id*.

Summary Judgment

"Summary judgment is appropriate in a patent case, as in other cases, when there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law." *Nike, Inc. v. Wolverine World Wide, Inc.*, 43 F.3d 644, 646 (Fed. Cir. 1994); FED. R. CIV. P. 56(c). The moving party bears the initial burden of "informing the district court of the basis for its motion" and identifying the matter that "it believes demonstrate[s] the absence of a genuine issue of material fact." *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). If the moving party meets this burden, the nonmoving party must then set forth "specific facts showing that there is a genuine issue for trial." FED. R. CIV. P. 56(c), *see also T.W. Elec. Serv., Inc. v. Pacific Elec. Contractors Ass'n*, 809 F.2d 626, 630 (9th Cir. 1987).

A party seeking to invalidate a patent must overcome a presumption that the patent is valid. *See* 35 U.S.C. § 282; *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238, 2243 (2011); *United States Gypsum Co. v. National Gypsum Co.*, 74 F.3d 1209, 1212 (Fed. Cir. 1996). This presumption places the burden on the challenging party to prove the patent's invalidity by clear and convincing evidence. *Microsoft*, 131 S. Ct. at 2243; *United States Gypsum Co.*, 74 F.3d at

1212. Close questions of indefiniteness "are properly resolved in favor of the patentee." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1348 (Fed. Cir. 2005); *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1380 (Fed. Cir. 2001).

Claims must particularly point out and distinctly claim the invention. "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112 ¶ 2. The primary purpose of the requirement of definiteness is to provide notice to those skilled in the art of what will constitute infringement. *See United Carbon Co. v. Binney Co.*, 317 U.S. 228, 236 (1942). The definiteness standard is one of reasonableness under the circumstances, requiring that, in light of the teachings of the prior art and the invention at issue, the claims apprise those skilled in the art of the scope of the invention with a reasonable degree of precision and particularity. *See Shatterproof Glass Corp. v. LibbeyOwens Corp.*, 758 F.2d 613, 624 (Fed. Cir. 1985). To rule "on a claim of patent indefiniteness, a court must determine whether one skilled in the art would understand what is claimed when the claim is read in light of the specification." *Bancorp. Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1372 (Fed. Cir. 2004). "A determination of indefiniteness is a legal conclusion that is drawn from the court's performance of its duty as the construer of patent claims, [and] therefore, like claim construction, is a question of law." *Amtel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999).

I.   Claim Construction

A. Agreed Terms

The parties have agreed to the construction of one term. Doc. No. 180 at 6.

Claim Terms	Agreed Claim Construction
Supplementary data	Advertising data, customer reward management data, and/or hot links to web sites

In view of the parties' agreements on the proper construction of this term, the Court **ADOPTS AND APPROVES** this construction.

B. Disputed Terms

1. "payment data"

Smartflash's Proposed Construction	Defendants' Proposed Construction
"Data that can be used to make payment for content"	"data, distinct from access control data and user identity data, representing either actual payment made or record of payment made for requested content data"

The parties dispute two key issues: (1) whether "payment data" makes payments or represents payments; and (2) whether "payment data" is distinct from other forms of data.

Smartflash proposes that "payment data" is merely any data that can be used to pay for content. Smartflash argues that the patents-in-suit make it clear that the purpose of "payment data" is to make payments, not to represent a payment that has been made. Opening Brief at 5. Smartflash relies on Figure 12c, which diagrams a process beginning with "payment data for making a payment." *Id.* at 5 (citing '720 21:15–21:16). Smartflash argues that Defendants' construction is inappropriate because it would make certain claims nonsensical. *Id.* For example, Claim 30 of the '772 patent requires a device to transmit payment data for an item in response to a user selection for the item. '772 at 31:19–26. According to Smartflash, Defendants' construction would mean this claim requires a user to pay for an item before even selecting it. Opening Brief at 5. Smartflash also contends that "access control data" or "user identity data" may act as payment data if either is used to pay for content. *Id.* at 6.

Defendants contend that "payment data" can only be one of two things: (1) data representing an actual payment; or (2) data recording such payment. Apple Resp. at 2–3. In support, Defendants point to specification language stating, "payment data received may either

be data relating to an actual payment made to the data supplier or it may be a record of a

payment made . . . ." *Id.*. at 2 (citing '720 Patent at 6:58–63). Defendants argue that their

proposal is not nonsensical because it is not limited to prior payments. *Id.* at 3. According to

Defendants, their construction only requires that "payment data" reflect actual payment, whether

past or present. *Id.* Thus the claim language would not be nonsensical because payment would

only be made after a user selects the content. *Id.* Additionally Defendants argue that "[t]he

specification consistently describes 'payment data' as being distinct from access control data and

user identity data." Samsung Resp. at 3–4 (citing '720 Patent at 4:31–33 & 17:62–18:5).

According to Defendants, "access control data" and "user identity data" are independent of

"payment data" and thus, may be used to access payment data, which is the only type of data the

patents ever describe as being "used to pay for content." Samsung Resp. at 4–5 (citing '720

Patent at 5:30–33 & 14:57–61).

The specification discloses using payment data to "make a payment" through an e-

payment system or through the "system owner's data supply computer." '720 Patent at 20:8–10

& 21:15–26 ("[P]ayment data for making a payment to the system owner is received . . . and

forwarded to an e-payment system . . . . Payment record data, validating payment by the card to

the system owner, is then received back from the e-payment system . . . ."). This disclosure

shows that "payment data" can do more than just represent payments as Defendants contend.

Defendants' proposal also seeks to import a negative limitation into the construction of

"payment data" that would exclude "user identity data" and "access control data." As Defendants

note, the Summary of the Invention discusses "payment data" and "identification data" in

relation to one another. '720 Patent at 4:31–33 ("The payment data will normally be linked to a

card or card holder identification data for payment by the card holder."). Statements that describe

the invention as a whole, rather than preferred embodiments, are more likely to support a limiting definition of a claim term. *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 864 (Fed. Cir. 2004). This type of statement is more likely to be found in certain sections of the specification, such as the Summary of the Invention. *Id.*

Turning to the claims of the patent, Claim 30 of the '772 patent is representative and states:

> 30. A data access terminal for controlling access to one or more content data items stored on a data carrier, the data access terminal comprising:
> > a user interface;
> > a data carrier interface;
> > a program store storing code implementable by a processor; and
> > a processor coupled to the user interface, to the data carrier interface and
> to the program store for implementing the stored code, the code comprising:
> > > . . .
> > > code responsive to said first user selection of said selected at least one content data item to transmit *payment data* relating to payment for said selected at least one content item for validation by a payment validation system;
> > > code to receive payment validation data defining if said payment validation system has validated payment for said selected at least one content data item;
> > > . . . .

'772 Patent at 30:65–31:7 & 31:22–29 (emphasis added). Claim 30 does not refer to user identification data, nor does it preclude "payment data" from being user identification data.

In support of their argument, Defendants cite to Claim 12 of the '598 Patent, which does recite both "payment data" and "identification data":

> 12. a portable data carrier as claimed in claim 10, wherein the code to provide payment to the payment validation system comprises code to provide the *payment data* and/or *identification data* to the network operator.

The recitation of both "payment data" and "identification data" in the same claim suggests that these terms do refer to different, distinct data. *See Becton, Dickinson & Co. v. Tyco Healthcare Group, LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) ("Where a claim lists elements

separately, the clear implication of the claim language is that those elements are distinct components of the patented invention.") (citations and internal quotation marks omitted). However, Claim 12 of the '598 Patent also suggests that identification data itself may be used for payment. This reading is consistent with the claims from which Claim 12 depends, such as Claim 8. Claim 8 recites:

> 8. A portable data carrier as claimed in Claim 7, wherein code to provide payment to the payment validation system comprises code to provide the identification data identifying the user of the portable data carrier to the payment validation system."

'598 Patent at 26:29–33.

Given this claim language, Defendants' proposed negative limitation is not warranted. Similarly, Defendants' proposal that "payment data" can only represent "actual payment made or record of payment made" is too narrow. The specification and cited claim language uses payment data broadly to refer to whatever data is being used "for making a payment." '720 Patent at 21:15; '598 Patent at Cl. 8. Accordingly, **"payment data"** is construed to mean **"data that can be used to make a payment for content."**

2. "payment validation system"

Smartflash's Proposed Construction	Defendants' Proposed Construction
No construction necessary Alternatively: "system that returns payment validation data in response to valid payment data"	"system to validate payment data and authorize payment"

The parties agree that the "payment validation system" is a system that validates payment data. The parties dispute whether "payment validation system" should have the additional limitation that it authorizes payment.

Smartflash argues that the claim language is clear and that no construction is necessary. Opening Brief at 7. Smartflash contends that Defendants' proposal would exclude certain embodiments. *Id.* at 7–8. According to Smartflash, Defendants' construction relies on certain embodiments in the specification where a user device transfers payment data to a data supplier that relies on a third party payment authority to process and authorize the payment. *Id.* at 8 (citing '720 Patent at 11:66–12:4). Smartflash argues that other portions of the specification directly contradict this construction because "payment validation system" is also used to refer to a system that validates payment data without performing the additional functions of a banking process system. *Id.* (citing '720 Patent at 13:53–13:62).

Defendants contend that the specification teaches that the "payment validation data" both validates and authorizes payment. Apple Resp. at 5 (citing '720 Patent at 8:21–23). Defendants argue that this is the only portion of the specification that describes the role of the "payment validation system." *Id.* According to Defendants, their construction only requires that the payment validation system be capable of validating payment data and authorizing payment in response to receipt of payment data, thus infringement is not tied to a particular use as Smartflash contends. *Id.* at 6–7 (citing *Nazomi Commc'ns, Inc. v. Nokia Corp.*, 739 F.3d 1339, 1344 (Fed. Cir. 2014)). Defendants argue that this is consistent with the inventors' stated goal of reducing data piracy by "binding the data access and payment together." Samsung Resp. at 5 (citing '720 Patent at 1:66–2:3).

The Summary of the Invention states:

The combination of the payment validation means with the data storage means allows the access to the downloaded data[,] which is to be stored by the data storage means, to be made conditional upon *checked and validated payment* being made for the data. *Binding the data access and payment together* allows the legitimate owners of the data to make the data available themselves over the

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internet without fear of loss of revenue, thus undermining the position of data pirates.

. . .

The terminal reads payment data from the data carrier and transmits this to a payment validation system for *validating the data and authorizing payment*. This may be part of the data supplier's computer system or it may be a separate system such as an e-payment system.

. . .

The payment validation system may be part of the data supplier's computer systems or it may be a separate e-payment system. In one embodiment the method further comprises receiving payment validation data from the payment validation system; and transmitting at least a portion of the payment validation data to the data supplier.

'720 Patent at 1:62–2:3, 8:21–25 & 8:64–9:2 (emphasis added).

Smartflash is correct that "[t]he fact that a patent asserts that an invention achieves several objectives does not require that each of the claims be construed as limited to structures that are capable of achieving all of the objectives." *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 908 (Fed. Cir. 2004). Indeed, the specification also discloses e-payment systems where payment authentication is performed at a later stage. *See* '720 Patent at 23:22-33 ("[p]ayment may be made directly to the system owner, and either concurrently with the content access and download process, or *at some later stage . . . .*") (emphasis added). In such a system, the content supplier could "validate" the payment by allowing a purchase on credit, with actual payment to occur at a later time. Thus, the specification is not as clear as Defendants have argued. Indeed the specification disclosure of "validating the data and authorizing the payment" suggests that "authorizing" is distinct from "validating." *See* '720 Patent at 8:21–25.

However, Smartflash's proposed construction is not complete. The payment validation system is not limited to returning data in response to only valid payment data. The system must

return whatever data results from an *attempt* to validate payment data. *See* '772 Patent at Claim 30 ("code to receive payment validation data defining if said payment validation system has validated payment for said selected at least one content data item"). The purpose of a validation system would be moot if it only worked when valid payment data was sent. Accordingly, **"payment validation system"** is construed to mean **"system that returns payment validation data based on an attempt to validate payment data."**

3. "payment validation data"

Smartflash's Proposed Construction	Defendants' Proposed Construction
No construction necessary Alternatively: "data indicating that payment data is valid"	"data received from payment validation system representing that payment was authorized for requested content data"

The dispute for this term is similar to the previous dispute for "payment validation system." Smartflash argues that "payment validation data" is data returned from a payment validation system indicating that payment data is valid. Opening Brief at 11. Smartflash contends that "payment validation data" is not required to authorize payment as Defendants' construction would require. *Id.* According to Smartflash, Defendants' construction is inconsistent with the plain language of the term, which refers to validation data, not authorization data. *Id.* at 12.

Defendants' construction requires that the "payment validation data" represent that payment data was both validated and authorized. Defendants rely on the same arguments discussed previously for "payment validation system." *See* Apple Resp. at 5–7; Samsung Resp. at 5–8. Thus, if the "payment validation system" must authorize the payment data, then the "payment validation data" must represent that authorization.

As previously discussed, the parties' constructions for this term are too narrow. *See* '772 Patent Claim 30 ("code to receive payment validation data *defining if* said payment validation

system has validated payment for said selected at least one content data item."). Thus, "payment validation data" is merely data received from a payment validation system and relates to whether a payment has been validated. Such a construction would add little clarity to the plain language of the term. Accordingly, **"payment validation system"** is construed to have its **plain meaning**.

4. **"content data memory" / "non-volatile data memory" / "memory . . . for storing data" / "memory configured to store . . . content" / "parameter memory" / "use rule memory"**

Smartflash's Proposed Construction	Defendants' Proposed Construction
No construction necessary	Each of (1) "content data memory," "data memory," "memory . . . for storing data," and "memory configured to store . . . content" is physically separate from each of (2) "parameter memory" and "use rule memory"
These terms do not require "physically separate" memories	

These terms all deal with types of memory for storing content. Smartflash contends that these "memory" terms do not need to be construed because the plain and ordinary meaning is sufficient. Opening Brief at 12. According to Smartflash, "the mere fact that some claims use two different phrases to identify required memory does not imply that those claims require 'physically' separate memories" because a single component may satisfy multiple elements of a claim. *Id.* at 13 (citing *Cannon Rubber Ltd. v. First Years, Inc.*, No. 05-1063, 163 F. App'x 870, 877 (Fed. Cir. Dec. 28, 2005) & *Intellectual Property Development, Inc. v. UAColumbia Cablevision*, 336 F.3d 1308, 1320 n.9 (Fed. Cir. 2003)). Smartflash argues that many of the asserted claims recite memory used to store different things, but that none of the claims require the memories be "physically separate." *Id.* at 12–13. Smartflash contends that Defendants' argument is flawed because the claims in the '772 Patent require "non-volatile memory configured to store multimedia content," but do not require any "parameter memory" or "use rule

memory." *Id.* at 13. Thus, according to Smartflash, Defendants' construction would require that "parameter memory" and "use rule memory" be physically separate from the claimed memory, even though "parameter memory" and "use rule memory" are not actually required by the claims. *Id.*

Defendants respond that the use of the conjunction "and" in a claim indicates that an inventor intended to claim distinct, separate components. Apple Resp. at 16 (citing *TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1375–76 (Fed. Cir. 2008) & *Gaus v. Conair Corp.*, 363 F.3d 1284, 1288 (Fed. Cir. 2004)). Defendants also rely on the prosecution history for the '720 Patent. Defendants point to a response to a 2007 office action, where the applicants amended their claims to include "parameter memory" separate from the "content memory" as well as a requirement that "use rules" and "use status data" be read "from the parameter memory." Apple Resp. at 18. Defendants argue that these amendments require separate memory, stored on separate chips, because the prior art *Hiroya* "disclosed that the ticket information and the electronic signature would be stored separately on the same chip." *Id.* at 19. According to Defendants, this separate storage is needed to achieve the goals of the invention, otherwise "use status data" could not be updated as described in the patents. Samsung Resp. at 11 (citing '720 Patent at 4:53–5:24).

Distinctly recited limitations are usually interpreted as distinct structures. *See Becton*, 616 F.3d at 1254 ("Where a claim lists elements separately, the clear implication of the claim language is that those elements are distinct components of the patented invention.") (citations and internal quotation marks omitted). The specification discloses distinct memory structures. *See* '720 Patent at 17:40–42, 18:8–10, & 18:18–20. Likewise, Figure 9 in the specification illustrates the "content data memory 214" and "non-volatile data memory 218" separately.

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Defendants rely on the prosecution history to argue that these distinct memories must also be "physically separate." The patentee's statements regarding the *Hiroya* prior art reference are as follows:

> 22. (Currently Amended) A method of controlling access to <u>content</u> data on a data carrier, the data carrier comprising non-volatile data memory <u>storing content memory</u> and non-volatile parameter memory storing use status data and use rules, the method comprising:
>
> > receiving a data access request <u>from a user for at least one content item of the content data stored in the non-volatile data memory</u>;
> > reading the use status data and use rules from <u>the parameter</u> memory <u>that pertain to use of the at least one requested content item</u>; ~~and~~
> > evaluating the use status data using the use rules to determine whether access to the ~~stored data~~ <u>at least one requested content item stored in the content memory</u> is permitted<u>; and</u> [[.]]
> > <u>displaying to the user whether access is permitted for each of the at least one requested content item stored in the non-volatile data memory</u>.
>
> . . .
>
> Claims 22, 23, 35-50, and 59-62 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hiroya (U.S. Patent No. 5,754,654). Applicants respectfully submit that Hiroya does not disclose each element of these claims.
>
> For example, Applicants' claim 22 as amended recites a method of controlling access to content data on a data carrier, *the data carrier comprising non-volatile data memory storing content memory and non-volatile parameter memory storing use status data and use rules*, the method comprising:
>
> > receiving a data access request from a user for at least one content item of the content data stored in the non-volatile data memory;
> > reading the use status data and use rules from the *parameter memory* that pertain to use of the at least one requested content item;
> > evaluating the use status data using the use rules to determine whether access to the at least one requested content item stored in the *content memory* is permitted; and
> > displaying to the user whether access is permitted for each of the at least one requested content item stored in the non-volatile data memory
> > . . . Such limitations are not disclosed by Hiroya.
>
> Hiroya discloses an electronic ticket vending and refunding system wherein a ticket purchaser can purchase a ticket to an event, etc., through a man-machine interface, whereby the ticket information is transferred to an electronic ticket storage device (col. 11, lines 36-49). In this system, the electronic ticket is stored in the electronic ticket storage device and includes ticked [*sic*, ticket] information data and an electronic signature (col. 15, lines 62-67), and *the ticket can be*

> *redeemed by decrypting the electronic signature and ticket information data* so that a man-machine interface can verify the validity of the electronic ticket (col. 23, line 64-col. 24, line 18). Hiroya does not disclose status data and use rules stored in a *parameter memory*, wherein the use rules stored on the non-volatile memory are used to analyze the use status data stored on the non-volatile memory to determine whether access to *separately-stored requested content* is permitted as required in Applicants' claim 22 as amended. Hiroya discloses that electronic ticket information itself includes *both the ticket data and the validity data*, and that the electronic ticket information must be decrypted to be validated. *Hiroya does not disclose use status data stored separately from associated content data*, and since ticket data is either valid or not valid in and of itself and does not include *separate use data*, Hiroya does not suggest or provide motivation to store use data as recited in claim 22. Further, as Hiroya discloses only ticket information that can be redeemed, and not content that can be accessed multiple times, partially used, used at different times, etc., such that there would be no motivation to include use data with the device of Hiroya. As Hiroya does not disclose such limitations, Hiroya cannot anticipate Applicants' claim 22 or the claims that depend therefrom.

Doc. No. 160, Ex. G, 2/6/2007 Amendment at 2 & 9–10 (emphasis and formatting modified).

Defendants interpret these statements as applicant arguing that content data being stored in a separate chip is what distinguishes it from the prior art.

Reading the statements in their entirety, the applicant was not arguing that the content data must be physically separate from other data. Instead, the applicant relied on evaluating "separate use data" according to use rules. The applicant contrasted the invention with the electronic ticket information of *Hiroya*, which was validated by an electronic signature, not use rules. The applicants' remarks do not rise to the level of "definitive statements" or a "clear and unmistakable" disclaimer that warrants importing Defendants' limitation. *See Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) ("As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on *definitive* statements made during prosecution.") (emphasis added); *see also SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1286–87 (Fed. Cir. 2006) ("There is no 'clear and unmistakable' disclaimer if a prosecution argument is

subject to more than one reasonable interpretation, one of which is consistent with a proffered meaning of the disputed term.") (citations and internal quotation marks omitted).

Additionally, Defendants rely on corporate documents created by Smartflash's predecessor that refer to a "Smartflash card" with a "second flash memory chip which can store downloaded music." Apple Resp. at 13 (quoting Ex, K at SF00031496; citing Ex. H at SF00015316). However, relying on extrinsic evidence to import a limitation is disfavored. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005) ("[W]hile extrinsic evidence can shed useful light on the relevant art, we have explained that it is less significant than the intrinsic record in determining the legally operative meaning of claim language.") (citations and internal quotation marks omitted); *id.* at 1319 ("[E]xtrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence."). Defendants' proposed limitation is rejected. Accordingly, **"content data memory," "non-volatile data memory," "memory . . . for storing data," "memory configured to store . . . content," "parameter memory," and "use rule memory"** are construed to have their **plain meaning**. The patent does not require that these be physically separate.

5. "data carrier"

Smartflash's Proposed Construction	Apple's Proposed Construction	Samsung's Proposed Construction
No construction necessary Alternatively: "Medium capable of storing information"	"Removable smart card or integrated circuit (IC) card, distinct from data access terminal, data access device, and handheld multimedia terminal, having two or more separate nonvolatile memories, for storing both payment data and content data"	"A removable smart card or integrated circuit (IC) card, distinct from a data access device, a handheld multimedia terminal and a data access terminal, incorporating a processor and two or more separate nonvolatile memories for storing both payment data

		and content data"

The dispute over "data carrier" is whether the data carrier can be a general data storage medium, as Smartflash proposes, or whether it must be a smart card or integrated circuit card.

Smartflash believes no construction is necessary for "data carrier." Smartflash argues that Defendants' proposals improperly import new limitations into the claims. Opening Brief at 17 (citing *Phillips*, 415 F.3d at 1324–27, 1329–30). According to Smartflash, some, but not all, embodiments of a data carrier are removable smart cards or IC cards. *Id.* at 18. In support, Smartflash cites to portions of the specification it contends disclose data carriers integrated with other apparatuses. *Id.* (citing '720 Patent at 16:6–10). Additionally, Smartflash argues that the "data carrier" does not require separate non-volatile memories for the same reasons as the previous "memory" terms. Opening Brief at 20. Finally, Smartflash contends that the construction should not define what must be stored on all data carriers because each claim specifies what must be on the carrier. *Id.* at 21.

Defendants respond that the patents' descriptions and embodiments uniformly describe the "data carrier" as a removable smart card or IC card. Apple Resp. at 7. Defendants also note that Smartflash has proposed that another disputed term—"the card"—be construed to mean "the data carrier." *Id.* at 8. In support of their proposal to require separate memories, Defendants argue that "applicants expressly disclaimed a data carrier with only one memory" by "distinguish[ing] the Hiroya reference because it lacked separate memories for respectively[] storing (1) use status data and (2) content storage memory." *Id.* at 11.

The first issue is whether to require a "removable smart card." The Summary of the Invention states:

> The data memory for storing content data may be optic, magnetic or semiconductor memory, but preferably comprises Flash Memory. . . . Preferably *the card* is configured as an IC card or smart card and has a credit card-type format, although other formats such as the "memory stick" format may also be used. This provides a small and convenient portable format and facilitates removable interfacing with a variety of devices.

'720 Patent at 6:17–31 (emphasis added); *see id.* at 4:62–64 ("use rules may be linked to payments made from the *card* . . . .") (emphasis added). Defendants are correct that consistent usage of a claim term in a particular manner could warrant a narrower construction than would otherwise be appropriate based on the claim language. *AstraZeneca*, 633 F.3d at 1052 ("[W]hen a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single meaning, he has defined that term by implication.").

The specification does disclose a "portable data carrier (30)" that is illustrated as a card in Figure 2 and states that it is "based on a standard smart card . . . ." '720 Patent at 11:36–40. The same paragraph refers to the "card (30)" using the same numeral (30) that the specification used to refer to the data supplier. *Id.* at 11:40. Thus, "data carrier" and "card" are used interchangeably to some degree. However, the specification refers to "a data carrier *or* smart Flash card." *See* '720 Patent at 18:55–58 ("FIGS. 11a and 11b show a flow diagram of a process for registering a *data carrier or smart Flash card* with a data supplier or system owner operating a data supply system as illustrated in FIG. 6.") (emphasis added). The usage of "or" could either imply that "data carrier" and "smart Flash card" are synonyms, or that a "data carrier" can be something broader than a smart card.

Additionally, the specification also shows that "data carrier" need not be removable. '720 Patent at 16:1–10 ("*In most embodiments* of the terminal the SFC interface allows the smart Flash card data carrier to be inserted into and removed from the terminal, *but in some embodiments the data carrier may be integral with the terminal.*") (emphasis added); *see id.* at

4:42–43 ("the data carrier may also be *integrated* into other apparatus, such as a mobile communications device.") (emphasis added). An integrated data carrier would be contrary to the idea of a removable card.

Considering the specification in its entirety, Defendants' proposed construction would improperly limit "data carrier" to a preferred embodiment. *See Constant v. Advanced Micro-Devices, Inc.*, 848 f.2d 1560, 1571 (Fed. Cir. 1998) ("Although the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims."). None of the extrinsic evidence offered by Defendants warrants limiting the generic term "data carrier" to the specific physical structure of a removable card.[1] Additionally, Defendants' proposal requiring "separate" memories is rejected for the same reasons discussed in the previous term.

Although Smartflash contends that no construction is necessary, "data carrier" will be construed so as to clarify that the "carrier" portion of the term does not refer to a signal carrier wave, such as for wireless communications. Accordingly, **"data carrier"** is construed to mean **"medium capable of storing information."**

6. "portable data carrier"

Smartflash's Proposed Construction	Apple's Proposed Construction	Samsung's Proposed Construction
No construction necessary Alternatively: "Portable medium capable of storing information"	"Removable smart card or integrated circuit (IC) card that interfaces with a variety of devices, distinct from data access terminal, data access device, and handheld multimedia terminal,	"A removable smart card or integrated circuit (IC) card, distinct from a data access device, a handheld multimedia terminal and a data access terminal,

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[1] Following the deposition of inventor Patrick Racz, the Apple Defendants filed supplemental briefing arguing that the Mr. Racz's testimony confirms their proposed construction. Supp. Brief at 1. Nothing in the supplemental briefing changes the analysis for this term. The inventor testimony cited by Defendants merely highlights that the specification refers to the "data carrier" as being a card. As previously discussed, using a card is merely a preferred embodiment. Defendants also cite to the inventor's testimony regarding an e-mail that was part of a prior business negotiation. This extrinsic evidence is given minimal weight during claim construction. *See Phillips*, 415 F.3d at 1318.

	having two or more separate nonvolatile memories, for storing both payment data and content data"	incorporating a processor and two or more separate nonvolatile memories for storing both payment data and content data that interfaces with a variety of devices"

The dispute over this term is similar to the dispute over the "data carrier" term. The key difference is the dispute over the term portable. Smartflash contends that the word "portable" is commonly understood and thus does not need to be construed. Opening Brief at 22.

The Apple Defendants respond that the specification equates portability with the ability to interface with a variety of devices." Apple Resp. at 14–15 (citing '720 Patent at 6:26–31). The Samsung Defendants contend that "data carrier" and "portable data carrier" are used synonymously throughout the patents. Samsung Resp. at 20 (citing '720 Patent at 8:10–15, 9:61–63, 10:66, 11:36, 16:4, & 16:7–8). Alternatively, the Samsung Defendants agree with the Apple Defendants that the only difference between a "data carrier" and a "portable data carrier" is that a "data carrier" is a removable card that interfaces with a single or dedicated device, whereas a "portable data carrier" can interface with a variety of devices. Samsung Resp. at 21.

The Summary of the Invention refers to portability as allowing the data carrier to "access content or, in the example, play music without the need to be linked to a communications system or to be on-line to the internet." '720 Patent at 5:12–15. Additionally, it states that the "'memory stick' format may be used. . . . [to] provide[] a small and convenient *portable* format [that] facilitates removable interfacing with a variety of devices." *Id.* at 6:17– 31 (emphasis added). These disclosures don't warrant giving "portable" a special meaning beyond its ordinary meaning of being readily moveable. *See Constant*, 848 F.2d at 1571; *see also Phillips*, 415 F.3d

at 1323. Based on the previous construction of the term "data carrier," **"portable data carrier"**

is construed to have its **plain meaning**.

7.   "use rule(s)" / "use rule(s) data" / "data use rule data"

Smartflash's Proposed Construction	Defendants' Proposed Construction
No construction necessary Alternatively: "Regulation (or rule) related to the use of content"	"Rule/data, associated with a separately stored content data item, indicating permissible use of the content data item"

8.   "access rule(s)"

Smartflash's Proposed Construction	Defendants' Proposed Construction
No construction necessary Alternatively: Regulation (or rule) related to access to content	Rule, associated with a separately stored content data item, specifying under what conditions a user is allowed access to the content data item

Smartflash contends that there is no basis in the patents or prosecution history for the

proposition that "use rules" or "access rules" must be "physically separate" from content.

Opening Brief at 24. Smartflash argues that there was no clear disavowal in the in the

prosecution history, and that any disavowal would not apply to different claim terms appearing

in later continuation applications. *Id.* at 25. Smartflash contends that Defendants' proposed

"indicating permissible use . . ." and "specifying under what conditions . . ." limitations are taken

directly from certain claims and placed into the claim term definitions. *Id.* at 26. According to

Smartflash, this would force language into other claims where it would not make sense. *Id.*

For "access rule(s)," Defendants respond that the applicant argued that access rules and

content data were written in physically separate memories in order to overcome *Hiroya*. Apple

Resp. at 21. Defendants contend that their construction "aligns with the teachings of the patent to

explain that these 'access rules' are used to control access to specific content data items . . . ." *Id.* (citing '720 Patent at 7:31–33 & 23:59–24:8.).

Defendants argue that their proposed construction for the "use rule(s)" terms, use both the specification' disclosures and the applicant's statements to the PTO to assist the jury's understanding of the terms. Apple Resp. at 21. According to Defendants, the applicant "specifically disclaimed being able to read 'use status data' and 'use rules' from anything but a memory that is physically separate from the content memory." *Id.* at 22.

For the reasons previously discussed for the "memory" terms, Defendants' proposal of requiring "separately stored content" is rejected.[2]

Once the separately stored issue is resolved, Smartflash's alternative proposals for these terms are very similar to Defendants' proposals. Both constructions are supported by the specification, which states that "[t]he carrier may . . . store content use rules pertaining to allowed use of stored data items" and that "use rules data indicat[e] permissible use data stored on the carrier." '720 Patent at 4:62–64 & 9:16–17. Additionally, Claim 3 of the '720 Patent recites "at least one access rule specifying at least one condition for accessing the retrieved data written into the data carrier, the at least one condition being dependent upon the amount of payment associated with the payment data forwarded to the payment validation system." Similarly, Claim 6 of the '458 Patent recites "use rules data indicating permissible use of data stored on the carrier."

This intrinsic evidence shows that the disputed terms are being used in accordance with their plain and ordinary meaning. Further construing the terms would only lead to confusion

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[2] As additional support for this conclusion, claim 6 of the '458 Patent recites "use status data," "use rules data," and "stored data" without reciting any specific memory.

instead of clarification. Accordingly, **"use rule(s),"** **"use rule(s) data,"** **"data use rule data,"** and **"access rule(s)"** are construed to have their **plain meaning**.

9. "use status data"

Smartflash's Proposed Construction	Defendants' Proposed Construction
No construction necessary Alternatively: "indication of use status"	"data, associated with a separately stored content data item, indicating past use of the content data item"

Smartflash argues that "use status data" need not be stored separately from content for the same reasons it set forth in the "use rules" terms above. Opening Brief at 27. Smartflash also contends that Defendants' construction is incorrect because it would limit asserted claims to only covering use rules that rely on tracking the past use of a content data item. *Id.*

Defendants respond that the patent makes it clear that "use status data" indicates "past use of stored data." Apple Resp. at 23 (citing '720 Patent at 9:35–38). Defendants cite to an embodiment of Claim 1 where a user's past use of a content item is compared with a specific use rule. *Id.* (citing '720 Patent Claim 1(c)).

For the same reasons discussed in the "memory" terms, Defendants' proposed requirement of "separately stored content" is rejected.

As to the issue of whether "use status data" should be limited to "indicating past use," the Summary of the Invention states:

> The invention also provides a related method of controlling access to data from a data carrier, comprising retrieving *use status data from the data carrier indicating past use of the stored data*; retrieving use rules from the data carrier; evaluating the use status data using use rules to determine whether access to data stored on the carrier is permitted; and permitting access to the data on the data carrier dependent on the result of said evaluating.

'720 Patent at 9:35–38 (emphasis added). The specification also refers to "use status data" being updated *after* content has been accessed. *Id.* at 25:51–56 ("*Once play is complete* the process moves to step S85 where updated content use data is written to the smart Flash card. . . . This record can then be used in steps S81 and S83 to determine, on a *subsequent occasion*, whether *further* use of the content data item is permitted.") (emphasis added). However, Smartflash cites to portions of the specification it contends refer to use status data in situations other than past use. For example, the specification states that:

> The carrier may also store content use rules pertaining to allowed use of stored data items. These use rules may be linked to payments made from the card to provide payment options such as access to buy content data outright; *rental access to content data for a time period* or for a specified number of access events . . . .

Id. at 4:59–5:3 (emphasis added); *id.* at 3:17–18 ("access to part of the data set might thereafter be controlled by payments made by a user at a later stage"). The specification also provides for rules that "could provide access for, say, *one month from the download date*" or "unlimited plans but only on *specified players, for example set top boxes owned by a particular cable TV network* . . . ." *Id.* at 23:59–24:2 (emphasis added). Defendants contend that these disclosures refer to "content use rules" and "content access rules" rather than "use status data." However, these rules must be applied to something in order to be operative. The claims show that the rules are applied to use status data. For example, Claim 1 of the '720 Patent recites: "reading the use status data and use rules from the parameter memory that pertain to use of the at least one requested content item; / *evaluating the use status data using the use rules* to determine whether access to the at least one requested content item stored in the content memory is permitted." Given this context, and the disclosures cited by Smartflash, "use status data" is not limited to

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only past use. Defendants' proposed construction would improperly limit the disputed term to particular embodiments. Accordingly, **"use status data"** is construed to have its **plain meaning.**

10. "said code to control access permitting access to said second selected one or more items of retrieved multimedia content"

Smartflash's Proposed Construction	Defendants' Proposed Construction
No construction necessary Alternatively: "code to evaluate use status data and use rules to determine whether access is permitted to second selected one or more items of retrieved multimedia content items"	indefinite

Smartflash contends that the antecedent basis for this term is "code to evaluate said use data and use rules to determine whether access is permitted to said second selected one or more items of retrieved multimedia content." Opening Brief at 29–30. Smartflash also submits an expert declaration in support of this position. *Id.*, Ex. 1, 6/13/2014 Declaration of Mark T. Jones.

Defendants respond that Claim 1 also contains this phrase, and that the only reasonable interpretation is "code to control access," and thus, the lack of any such antecedent support for this phrase in claim 25 renders the claim indefinite. Apple Resp. at 25; Samsung Resp. at 34. Defendants also cite to Claim 6 of the '772 Patent which uses both the phrase "said code to control access" and "code to evaluate," but not referring to each other. Apple Resp. at 26. According to Defendants, this negates Smartflash's argument that they should be interpreted as referring to the same code in Claim 25. *Id.* Defendants also offer their own expert opinion stating that one of ordinary skill in the art would not understand "code to evaluate" to be the antecedent basis for "said code to control access." *Id.* (citing Doc. No. 163-1, 6/27/2014 Cromarty Decl. at ¶ 57). Defendants contend that "code to control access" is the code that allows access, whereas

"code to evaluate use status data and use rules to determine whether access is permitted" is the code that determines whether access should be allowed in the first place. Apple Resp. at 26.

"The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112 ¶ 2. If a claim does not satisfy this requirement, it is indefinite, and thus invalid. "A determination of indefiniteness is a legal conclusion that is drawn from the court's performance of its duty as the construer of patent claims" and "therefore, like claim construction, is a question of law." *Atmel Corp. v. Info Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999) (citation and internal quotation marks omitted).

The Supreme Court of the United States has recently interpreted 35 U.S.C. § 112 ¶ 2 "to require that a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014). However, antecedent basis may be implicit rather than explicit. *Energizer Holdings Inc. v. Int'l Trade Comm'n*, 435 F.3d 1336, 1371 (Fed. Cir. 2006) (holding that "an anode gel comprised of zinc as the active anode component" provided implicit antecedent basis for "said zinc anode"); *see also* Manual for Patent Examining Procedure § 2173.05(3) (8th ed., rev. 9, Mar. 2014) (noting that "the failure to provide explicit antecedent basis for terms does not always render a claim indefinite").

Looking at Claim 25 in its entirety, the implicit antecedent basis for "said code to control access" is the "code to evaluate said use status data and use rules to determine whether access is permitted to said second selected one or more items of retrieved multimedia content." *See Energizer*, 435 F.3d at 1371. The implicit antecedent basis language states that the purpose of the "evaluation" is "to determine whether access is permitted to said second selected one or more

items of retrieved multimedia content." '772 Patent Claim 25. The disputed term refers to "code to control access permitting access to said second selected one or more items of retrieved multimedia content." *Id.* Reading the plain language of the claim, a person of ordinary skill would understand with reasonable certainty that the second statement is referencing the first. Thus, Defendants' indefiniteness argument is rejected and **no further construction is necessary**.

11. "the card"

Smartflash's Proposed Construction	Apple's Proposed Construction	Samsung's Proposed Construction
"the data carrier"	"the data carrier"	indefinite

Smartflash argues the "the card" in Claim 13 of the '317 Patent "is an obvious clerical drafting mistake that should read 'the data carrier.'" Opening Brief at 31.

The Apple Defendants agree that "the card" should be construed as "the data carrier," but contend that it was not a clerical error on the part of the drafter. Apple Resp. at 25. According to the Apple Defendants, "[t]he fact that 'the card' was substituted for 'the data carrier' in the claim suggests not that the draftsman made a mistake, but that a data carrier is, in fact, a smart card." *Id.*

The Samsung Defendants argue that the more plausible explanation is that the phrase "the card" should have been "a card." Samsung Resp. at 35. According to the Samsung Defendants, this would: (1) be a less drastic change to the existing claim language; (2) eliminate the need for an antecedent basis; and (3) be consistent with the patent's extensive discussion of data cards. *Id.* The Samsung Defendants conclude that because "[t]here is no way of knowing which (if either) correction to claim 13 should apply. . . . claim 13 cannot be corrected, and claim 13 is invalid as indefinite." *Id.*

A court may correct an error in a patent claim "only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims." *See Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1354 (Fed. Cir. 2003). Judicial correction of a claim is retroactive. *Advanced Medical Optics, Inc. v. Alcom Inc.*, 361 F. Supp. 2d 370, 384 (D. Del. 2005).

Because the purported error is more than a misspelling or a missing letter, Smartflash's request to modify the plain language is inappropriate. *See LG Elecs., Inc. v. Quanta Computer Inc.*, 566 F. Supp. 2d 910, 913 (W.D. Wis. 2008) (noting the "nearly impossible standard for judicial correction of a patent" and citing *Novo*, which the court noted "refus[ed] to correct 'a' to 'and' because other possibilities for correction existed"). This decision is consistent with the principle that "[c]ourts do not rewrite claims; instead, we give effect to the terms chosen by the patentee." *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999); *see Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004) (noting that "courts may not redraft claims, whether to make them operable or to sustain their validity"). Unlike the "said code to control access . . ." term addressed above, the antecedent basis for "the card" is not reasonably certain. *Nautilus*, 134 S. Ct. at 2129. The Samsung Defendants' theory is a reasonable interpretation. Indeed, it would be consistent with the patent to have a dependent claim that further narrowed the "data carrier" to an embodiment where it was "a card." Since the Court cannot know what correction is appropriate, Claim 13 must be found **invalid as indefinite**. *See Novo*, 350 F.3d at 1358.

12. Terms Defendants Argue Are Means-Plus-Function Terms

As a threshold matter, the parties dispute whether the remaining terms for construction are means-plus-function terms under 35 U.S.C. § 112 ¶ 6. Defendants contend that twelve of the terms are means-plus-function terms that require construction to determine the proper structure. Defendants argue that the rest of the terms are means-plus-function terms that lack sufficient structure.[3] If the terms are not means plus function terms then no construction is necessary.

Title 35 U.S.C. § 112, ¶ 6 provides: "An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." Further, "[t]he scope of a claim under [35 U.S.C.] section 112, paragraph 6 . . . must be limited to structures *clearly linked or associated* with the claimed function in the specification or prosecution history and equivalents of those structures." *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1219 (Fed. Cir. 2003) (emphasis added); *see Asyst Techs., Inc. v. Empak, Inc.*, 268 F.3d 1364, 1369-70 (Fed. Cir. 2001) ("Section 112 paragraph 6 does not permit incorporation of structure from the written description beyond that necessary to perform the claimed function.") (citation and internal quotation marks omitted).

When a claim term does not use "means," there is a "rebuttable presumption that [35 U.S.C.] § 112 ¶ 6 does not apply." *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1358 (Fed. Cir. 2004). This presumption can be overcome if it is demonstrated that the claim term fails to recite sufficiently definite structure or else recites function without

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[3] These terms are briefed in Defendants' Motions for Summary Judgment of Indefiniteness and are listed in Appendix C of this Order.

reciting sufficient structure for performing that function. *Id.* at 1359–60. The presumption

flowing from the absence of the term "means" is a strong one that is not readily overcome. *Id.*

Here, the claims at issue do not use the term "means." To overcome the presumption,

Defendants argue that the claims recite only the word "processor," without any other structure.

Samsung MSJ at 3. According to Defendants, the recitation of a "processor" and "code", without

any specialized structure for performing the claimed functions, is insufficient. *Id.* at 5.

Some courts have found that reciting a "computer" can warrant means-plus-function

treatment:

> A reference to a "computer" provides no basis to distinguish the structure from
> any other general purpose computer; thus, "computer" does not adequately
> describe a specific structure. The same logic applies here—if "computer" is
> insufficient structure for a "means" limitation, the naked term "computer" cannot
> describe sufficient structure when recited directly in the claim limitation.

Soque Holdings Bermuda Ltd. v. Keyscan, Inc., No. 09-2651, 2010 WL 2292316, at *12 (N.D.

Cal. June 7, 2010) (Patel, J.) (citations omitted). However, the present case is more analogous to

Linear Technology Corp. v. Impala Linear Corp., in which the Court of Appeals for the Federal

Circuit found that "when the structure-connoting term 'circuit' is coupled with a description of

the circuit's operation, sufficient structural meaning generally will be conveyed to persons of

ordinary skill in the art, and § 112 ¶ 6 presumptively will not apply." 379 F.3d 1311, 1320 (Fed.

Cir. 2004). Here, in each of the disputed terms in Appendix C, "code" and "processor" are

coupled with a description of the code's or processor's operation.

Courts in this district have reached the same conclusion under similar circumstances. *See,*

e.g., Eolas Techs., Inc. v. Adobe Sys., Inc., 810 F. Supp. 2d 795, 810 (E.D. Tex. 2011) (Davis, J.)

(finding sufficient the patentee's argument that "virtually every element asserted by Defendants

includes a phrase containing either the words 'computer readable program code for . . .' or

'software comprising computer executable instructions [to] . . .' followed by a description of the

code's (or software's) operation"), *aff'd sub nom. Eolas Techs. Inc. v. Amazon.com, Inc.*, 521 F. App'x 928 (Fed. Cir. 2013), *opinion withdrawn in part on reconsideration as to another term*, 6:09-cv-446, 2011 WL 11070303 (E.D. Tex. Sept. 23, 2011); *Aloft Media, LLC v. Adobe Sys. Inc.*, 570 F. Supp. 2d 887, 898 (E.D. Tex. 2008) (Love, J.) ("[W]hen the structure-connoting term 'computer code' is coupled with a description of the computer code's operation, as provided by the 'wherein' clauses, sufficient structural meaning is conveyed to persons of ordinary skill in the art.") (footnote omitted), *adopted*, No. 6:07-CV-355, 2008 WL 5784443 (E.D. Tex. Sept. 24, 2008) (Davis, J.); *Versata Software, Inc. v. Sun Microsystems, Inc.*, No. 2:06-cv-358, 2008 WL 3914098, at *14 (E.D. Tex. Aug. 19, 2008) (Ward, J.) (holding that the presumption against means-plus-function treatment was not overcome as to claims reciting "computer readable program code configured to cause a computer to").

Additionally, several Federal Circuit opinions support this conclusion. *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) ("[W]here a claim is not drafted in means-plus-function format, the reasoning in the *Aristocrat* line of cases does not automatically apply, and an algorithm is therefore not necessarily required."); *Flo Healthcare Solutions, LLC v. Kappos*, 697 F.3d 1367, 1374 (Fed. Cir. 2012) ("When the claim drafter has not signaled his intent to invoke § 112, ¶ 6 by using the term 'means,' we are unwilling to apply that provision without a showing that the limitation essentially is devoid of anything that can be construed as structure."); *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996) (finding that "detent mechanism" was not a means-plus-function term because it denotes a type of device with a generally understood meaning in the mechanical arts).

Finally, other district courts have reached similar conclusions. *See, e.g., Affymetrix, Inc. v. Hyseq, Inc.*, 132 F. Supp. 2d 1212, 1232 (N.D. Cal. 2001) (Fogel, J.) (finding that "'computer

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code' is not a generic term, but rather recites structure that is understood by those of skill in the art to be a type of device for accomplishing the stated functions"); *Trading Techs. Int'l, Inc. v. eSpeed, Inc.*, No. 04 C 5312, 2006 WL 3147697, at *11-13 (N.D. Ill. Oct. 31, 2006) (similar as to "program code" terms); *Wi-LAN USA, Inc. v. Alcatel-Lucent USA, Inc.*, No. 12-23568, 2013 WL 4811233, at *41–42 (S.D. Fla. Sept. 9, 2013) (similar as to "processor" terms).

Defendants have failed to overcome the presumption that the disputed terms, which do not use the word "means," are not means-plus-function terms governed by 35 U.S.C. § 112, ¶ 6. Thus, these disputed terms need not be construed. *See* Doc. No. 174 at 1–2 (Smartflash submits that "neither side has alleged that the terms at issue require construction if the Court finds that § 112 ¶ 6 is inapplicable.").

II.   Motion for Summary Judgment

Similar to the previous terms, Defendants argue that several terms are means-plus-function terms and are indefinite because they lack adequate corresponding structure. For the same reasons discussed above, Defendants have failed to show that these terms lack structure so as to overcome the presumption against being treated as means-plus-function terms. Accordingly, it is recommended that Defendants' Motions for Summary Judgment of Indefiniteness be **DENIED**.

RECOMMENDATION

The Court hereby **ADOPTS** the above claim constructions for the patents-in-suit. For ease of reference, the Court's claim interpretations are set forth in a table in Appendix A & B. Additionally, the Court recommends that Defendants' Motions for Summary Judgment for Invalidity be **DENIED**. The Court's determinations for the terms in the Motion for Summary Judgment are set forth in Appendix C.

Within fourteen days after receipt of the Magistrate Judge's report, any party may serve and file written objections to the findings and recommendations of the Magistrate Judge.

A party's failure to file written objections to the findings, conclusions, and recommendations contained in this Report within fourteen days after service shall bar that party from *de novo* review by the District Judge of those findings, conclusions, and recommendations and, except upon grounds of plain error, from attacking on appeal the unobjected-to proposed factual findings and legal conclusions accepted and adopted by the district court. *Douglass v. United Services Auto. Assn.*, 79 F.3d 1415, 1430 (5th Cir. 1996) (*en banc*) (*superseded on other grounds*, 28 U.S.C. § 636(b)(1)) (extending the time to file objections from ten to fourteen days).

So ORDERED and SIGNED this 24th day of September, 2014.

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K. NICOLE MITCHELL
UNITED STATES MAGISTRATE JUDGE

APPENDIX A

Non-Means-Plus-Function Terms	Court's Construction
Payment data	"data that can be used to make payment for content"
Payment validation system	"system that returns payment validation data based on an attempt to validate payment data"
Payment validation data	Plain meaning
Data carrier	"medium capable of storing information"
Portable data carrier	Plain meaning
Content data memory / data memory / memory . . . for storing data / memory configured to store . . . content / parameter memory / use rule memory	Plain meaning
Use rules(s) / use rule(s) data / data use rule data	Plain meaning
Access rule(s)	Plain meaning
Use status data	Plain meaning
Said code to control access to said second selected one or more items of retrieved multimedia content	Not indefinite. No further construction necessary
The card	Invalid as indefinite

APPENDIX B

Alleged Means-Plus-Function Terms for Construction	Court's Construction
Code responsive to the payment validation data to retrieve data from the data supplier and to write the retrieved data into the data carrier	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code responsive to the payment validation data to retrieve said selected at least one content data item from a data supplier and to write said retrieved at least one content data item into said data carrier	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code responsive to said payment validation data to retrieve said selected at least one item of multimedia content via said wireless interface from a data supplier and to write said retrieved at least one item of multimedia content into said non-volatile memory	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code responsive to the payment validation data to receive at least one access rule from the data supplier and to write the at least one access rule into the data carrier, the at least one access rule specifying at least one condition for accessing the retrieved data written into the	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.

data carrier, the at least one condition being dependent upon the amount of payment associated with the payment data forwarded to the payment validation system	
Code responsive to the request and to the received payment data, to read data for the requested data item from a content provider	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code, responsive to the request and to the received payment data to output the item data to the requester over the communication interface	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to output payment data for a data item for making payments for the item when the item is supplied to a said requester	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to write updated use status data to the carrier after user access to the stored data	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to write partial use status data to the data carrier when only part of a stored data item has been accessed	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to present said second selected one or more items of retrieved multimedia content to a user via said display if access is permitted	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
"electronic payment system for confirming an	Not subject to 35 U.S.C. § 112 ¶ 6. No further

electronic payment . . . wherein the electronic payment system makes payments according to data in the payment distribution store associated with the forwarded data on confirmation of the payment and/or provision of the forwarded data to the card"	construction required.
Electronic payment system for confirming an electronic payment	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.

APPENDIX C

Alleged Means-Plus-Function Terms Lacking Adequate Structure	Court's Construction
A processor . . . for implementing . . . code, the code comprising	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Processor for controlling access to data	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Processor control code comprises	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code responsive to said user selection of said at least one selected item of multimedia content to transmit payment data relating to payment for said at least one selected item of multimedia content via said wireless interface for validation by a payment validation system	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.

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Code responsive to said user selection of said selected content data item to transmit payment data relating to payment for said selected content item for validation by a payment validation system	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to control access to said selected content data item responsive to the payment validation data	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to control access to said at least one selected item of multimedia content on said terminal responsive to said payment validation data	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to retrieve supplementary data in response to said characterizing data	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to output the supplementary data	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to evaluate said use status data and use rules to determine whether access is permitted to said second selected one or more items of retrieved multimedia content	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to evaluate said use status data and use rules to determine whether access is permitted to said second selected one or more retrieved	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.

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content data items	
Code to evaluate the use status data using the use rules data to determine whether access is permitted to the stored data	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to access the stored data when access is permitted	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Code to provide access to the at least one content data item in accordance with the at least one use rule	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Processor for controlling access to data	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.
Content synthesis code to generate substantially complete item data from partial item data provided from two or more sources	Not subject to 35 U.S.C. § 112 ¶ 6. No further construction required.